

Show Me value
Show me Return

AEROSPACE



THE AEROSPACE INDUSTRY IN MISSOURI PRODUCES AIRCRAFT, GUIDED MISSILE AND SPACE VEHICLE PARTS, AIRCRAFT ENGINES, AND OTHER AIRCRAFT PARTS AND

Aerospace Missouri

An estimated 40 aerospace or related firms in Missouri produce everything from entire aircraft to sofas and toilets and military avionics, weapons systems, and canopies. Employment is considered advanced manufacturing and comprises such jobs as aircraft mechanics and service technicians, aerospace engineers, and avionics technicians. In 2002-2003, the industry employed over 46,000 people and contributed to the 303,280 advanced manufacturing ancillary jobs in the state. Seven Missouri counties have a particular aerospace emphasis: St. Louis, Warren, St. Charles, Perry, Oregon, Newton, and Shannon.



THE FUTURE OF AEROSPACE IN MISSOURI

- ⇒ Employment among aircraft mechanics and service technicians is expected to be fair in Kansas City and St. Louis; and good in the west central region, with a 25% increase in employment.
- ⇒ Aerospace engineers may see an increase in employment opportunities in the next five years. Many current engineers are approaching retirement.
- ⇒ Aerospace engineering opportunities are expected to increase 16.7% by 2010.

PROMINENT AEROSPACE COMPANIES IN MISSOURI



ESSEX INDUSTRIES INC.

Located in St. Louis, Es-

*Westar Aerospace &
Defense Group,
Weldon Springs,
plans three
acquisitions in 2005
which will double
revenue.*

THE BOEING COMPANY

The Boeing Company, employing over 66,000 people in St. Louis (not all aerospace), produces both commercial and military aircraft such as the 737, 747, 767 tanker, AV-8B, and KC-10. Boeing's Integrated Defense Systems features the Naval Systems and Aerospace Support Divisions. Naval Systems is known for their work on warfighters and naval aircraft; Aerospace Support provides modifications, upgrades and services to existing aircraft. www.boeing.com



SABRELINER CORPORATION

Headquartered in St. Louis with a large facility in Perryville, Sabreliner employs 1,625 people with annual sales of \$250 million. In 2002, the firm won a five-year, \$40 million contract to overhaul KC-135 components under an agreement with Boeing. Sabreliner is best known for manufacturing the world's first twin-engined business jet.



GKN PLC: AEROSPACE SERVICES

With fabrication plants in Clayton, GKN Aerospace Services specializes in manufacturing metal and composite structural components for the F/A-18 E/F, C-17 and other Boeing military aircraft. GKN has invested \$20 million in facilities since 2001 to manufacture individual aircraft components. www.gknplc.com



Nearly invisible planes will soon be science fact.

*Sabreliner Corporation
will create more than 60
new jobs for
Ste. Genevieve through
2007 with a \$40
million overhaul of
U.S. Air Force KC-
135 Stratotankers.*



NU-TECH INDUSTRIES

Nu-Tech Industries, Grandview, part of the Triumph Aerospace Systems Group, manufactures parts and assemblies for the commercial aviation, aerospace, and defense industries. Nu-Tech specializes in five-axis, high-speed precision titanium and other hard alloy machining; and in five-axis, high-speed close tolerances for extruded materials. www.ntihc.com

ENGINEERED SUPPORT SYSTEM, INC.

Engineered Support System, Inc. is a diversified supplier of high-tech integrated military electronics, support equipment and logistics services for all branches of America's armed forces and certain foreign militaries. The firm is located in St. Louis, and has 2,300 employees.

www.engineeredsupport.com



AEROSPACE RESEARCH INSTITUTIONS IN MISSOURI

RESEARCH & EDUCATION CENTER



The Aerospace Research & Education Center (AeREC) is a consortium of Washington University, Saint Louis University, and the University of Missouri at Columbia and Rolla. Research focuses on design optimization, materials, manufacturing, structures, and control systems.

AeREC's goal is to provide education in aerospace through innovation, research, technology development, and transfer. AeREC also partners with the aerospace industry and government to assist federal research initiatives. www.me.wustl.edu



AEROSPACE EDUCATION IN MISSOURI

UNIVERSITY OF MISSOURI-ROLLA

The University of Missouri- Rolla (UMR), offering a B.S., M.S., and PhD in Aerospace Engineering, is well-known for its exceptional engineering school. Currently UMR is researching potential microwave techniques to test and inspect space shuttle foam. The project is funded by the NASA Marshall Space Flight Center with a two-year (2004-2005), \$265,000 grant.

<http://campus.umn.edu/maeem/research>



CENTRAL MISSOURI STATE



Central Missouri State University (CMSU) features a Council on Aviation Accreditation Aviation School which researches system design, avionics technology, and aircraft maintenance. CMSU is one of only 19 of 100 schools to be so designated.

www.cmsu.edu/Aviation/

The University of Missouri-Rolla is working with NASA to research the possible uses of microwave techniques to test and inspect space shuttle foam.

UNIVERSITY OF MISSOURI-COLUMBIA

The University of Missouri-Columbia offers a B.S. and M.S. in Mechanical & Aerospace Engineering, with an emphasis in design & manufacturing, dynamics & controls, thermal & fluid systems, and materials & solids. This department features the Structural Mechanics and Control Lab. <http://web.missouri.edu/~mae/>



SAINT LOUIS UNIVERSITY

Parks College of Engineering, Aviation and Technology at Saint Louis University allows aerospace engineering majors to design advanced aircraft and space vehicles, simulate their performance and test their designs in wind and water tunnels.

<http://parks.slu.edu/ame/index.html>



MISSOURI'S AEROSPACE FUTURE



A jet engine that doesn't pollute, flies at seven times the speed of sound, doesn't carry any fuel – impossible? No, the scramjet.

"We will continue to leverage the technology of this nation to create advantages for our military forces and meet the challenges that we will face in the years ahead," says Dr. Marvin R. Sambur, assistant secretary of the Air Force for acquisition. And Missouri will continue to play a vital role in defense manufacturing: the U.S. FY 2004 defense budget was \$379.9 billion, \$15.3 million more than the previous year; the 2005 budget is expected to be even larger. The Boeing Company, Sabreliner, and GKN Aerospace all received more than two military projects each in 2003 to manufacture, develop, or maintain existing aircraft.

RECENT AEROSPACE DEVELOPMENTS IN MISSOURI

www.sabreliner.com



Four companies, each with departments specializing in defense, and one university are expanding to Southwest Missouri:

- ⇒ Crosslink Polymer, based out of St. Louis, to Springfield's Jordan Valley Innovation Center. Crosslink has received \$3 million to develop more durable jet canopies for navy fighters.
- ⇒ Nantero Inc., also to Jordan Valley Innovation Center; Nantero has received \$6 million to improve computer chips in spacecraft.
- ⇒ Applied Systems Intelligence, to Jordan Valley. Applied Systems Intelligence equips military aircraft with chemical and biological materials.
- ⇒ Government Enterprise Management Systems to Joplin's Business and Technology Innovation Center. The firm recently received \$5 million in federal funding to evaluate command and control computers.
- ⇒ Southwest Missouri State University, main campus Springfield, plans to move its

MISSOURI DIVISION OF BUSINESS DEVELOPMENT & TRADE SERVICES & SUPPORT

Site Location Services: Missouri's Business Development & Trade Division offers comprehensive project management services to assist businesses with location solutions.

Global Trade & Investment: The Division operates offices in Mexico, Japan, and China to facilitate global trade and investment.

Financial Assistance: Business Development and Trade also serves as a portal for qualifying firms seeking additional financial assistance to support market expansion and capital expansion projects. The Division is directly responsible for administration and implementation of a wide variety of incentives.

Community Access: The Division serves as a conduit for expediting linkages between business and community economic development representatives.

State of Missouri, Department of Economic Development

Division of Business & Community Services

Harry S. Truman Building, Room 720

301 W. High St., P.O. Box 118

Jefferson City, MO 65102

866-647-3633